CLAIMS

1. (Currently Amended) A method comprising:

scanning an image with a plurality of sensing units;

storing the scanned data associated with the image to a plurality of memory cells;

receiving a starting parameter to identify at least one of the memory cells storing data associated with the scanned image; ~~and~~

sequentially reading the data stored in one or more of the memory cells, beginning with the memory cell identified by the starting parameter;

receiving an ending parameter to identify another one of the memory cells; and

sequentially reading data from one or more of the memory cells, beginning with the memory cell identified by the starting parameter and finishing with the memory cell identified by the ending parameter.

2. (Original) The method of claim 1, wherein said memory cells are each independent from other said cells and are read separately.

3. (Currently Amended) The method of claim 1, wherein said starting parameter is set by manually input when ~~said~~ a linear sensor is needed to be read.

4. (Currently Amended) The method of claim 1, wherein starting parameter is automatically generated by ~~said~~ a linear sensor.

5. (Currently Amended) The method of claim 1, wherein starting parameter corresponds to a specific memory cell that is the first one of said memory cells stored nonzero signal when ~~said~~ a linear sensor is sensing an object.

6. (Currently Amended) A method comprising:

receiving a parameter N, wherein ~~said~~ a linear sensor has a plurality of memory cells arranged in linear order and each said cell is independent from other said cells, and said parameter N is a positive integer;

numbering said memory cells sequentially from a first memory cell to a (N-1)-th memory cell depending on the linear arrangement order; and

reading the contents of the unnumbered memory cells sequentially from the N-th memory cell, wherein an attached parameter L can also be received at the same time to receive said parameter N, and L is a positive integer larger than N, wherein by way of said attached parameter to stop reading unnumbered memory cells after reading the L-th one of memory cells in the linear arrangement order.

7. (Original) The method of claim 6, wherein said attached parameter is set by manually input when said linear sensor is needed to be read.

8. (Original) The method of claim 6, wherein said attached parameter is one of said parameters of said linear sensor.

9. (Original) The method of claim 6, wherein said attached parameter is a specific memory cell stored the last nonzero signal when said linear sensor is sensing an object.

10. (Currently Amended) A method ~~for reading sensor,~~ comprising:

receiving a specific amount of parameters, wherein ~~said~~ a 2-D sensor is composed of a specific amount of linear sensors, and each said linear sensor has a plurality of memory cells arranged by linear order and each parameter is a positive integer corresponding to a single linear sensor; and

~~proceeding the reading action of each said linear sensors from the first one, comprising:~~

numbering said memory cells sequentially depending on linear arrangement order from ~~said~~ a first memory cell until ~~the~~ a (N-1)-th memory cell, wherein N is said parameter corresponding to said linear sensor; and

reading ~~the~~ contents of said memory cells that are unnumbered in linear arrangement order sequentially.

11. (Original) The method of claim 10, wherein each said memory cell is independent from other said cells and are read separately.

12. (Currently Amended) The method of claim 11, wherein each said parameter is set by ~~manually~~ manual input when said 2-D sensor is needed to be read.

13. (Original) The method of claim 11, wherein each said parameter is automatically generated by corresponding said linear sensor.

14. (Currently Amended) The method of claim 11, wherein each said parameter is a specific memory cell that is ~~the~~ a first one of said memory cells ~~stored~~ storing a nonzero signal when corresponding said linear sensor is sensing an object.

15. (Currently Amended) The method of claim 11, wherein a plurality of attached parameters can be received at the same time ~~to receive said parameters~~, wherein each of said attached parameter is an integer larger than the corresponding parameter~~s~~.

16. (Original) The method of claim 15, wherein each of said linear sensors corresponds to a specific one of said parameters, but it is not necessary that each of said linear sensors corresponds to a specific one of said attached parameters.

17. (Currently Amended) The method of claim 15, wherein each of a certain specific linear sensor corresponds to a certain specific said attached parameter K[[,]]; and

stopping reading said memory cells after reading ~~the~~ a K-th one of said memory cells when said linear sensor is reading the contents of said unnumbered memory cells sequentially.

18. (Currently Amended) The method of claim 15, wherein ~~the~~ a source of any attached parameter comprises at least one of:

~~manually~~ manual input ~~at the moment~~ to read said 2-D sensor,

~~the~~ automatic generation by said linear sensor, or~~; and~~

~~the~~ a last specific one of said memory ~~cell~~ cells ~~stored~~ storing a nonzero signal when said linear sensor is sensing an object.

19. (Currently Amended) A method ~~for reading sensor, comprises~~, comprising:

receiving a plurality of parameters, wherein ~~said~~ a linear sensor has a plurality of memory cells arranged in linear order and each said memory cell is independent from others, and each of said parameters is a positive integers;

numbering said memory cells sequentially from a first memory cell of said linear sensor depending on linear arrangement order sequentially to find out a plurality of specific memory cells with numbers equal to said parameters, wherein said specific memory cells are paired off and each pair of said specific memory cells marks a specific memory cell section; and

reading said specific memory cell sections sequentially depending on linear arrangement order.

20. (Currently Amended) The method of claim 19, further includes

determining ~~wherein a method of determine~~ the range of said specific memory cell sections when the amount of said parameters is odd, wherein the determining comprises:

choosing ~~the~~ a first memory cell ~~of all~~ and a first one of said specific memory cells to be a specific memory cell section and pairing the other specific memory cells off; and

choosing ~~the~~ a last one of said specific memory cells and ~~the~~ a last memory cell ~~of all~~ to be a specific memory cell section and pairing the other specific memory cells off.

21. (Canceled)

22. (Currently Amended) The method of claim 1 further includes setting the ending parameter according to a manual input.

23. (Previously Presented) The method of claim 1 wherein the linear sensor automatically generates the ending parameter.

24. (Previously Presented) A device comprising:

a linear sensor having a plurality of sensing units, configured in a linear arrangement, to detect at least one object; and

a plurality of memory cells to store the detected data associated with the object and allow sequential access to the stored data according to the linear arrangement of the sensing units and a starting parameter, the starting parameter to identify which memory cell is first in a sequence of memory cells to be read;

wherein the memory cells allow sequential access to the stored data according to the linear arrangement of the sensing units, the starting parameter and an ending parameter, the ending parameter to identify which memory cell is last in the sequence of memory cells to be read.

25. (Canceled)

26. (Previously Presented) A system comprising:

means for scanning an image with a plurality of sensing units;

means for storing the scanned data associated with the image to a plurality of memory cells;

means for receiving a starting parameter to identify at least one of the memory cells storing data associated with the scanned image; and

means for sequentially reading the data stored in one or more of the memory cells, beginning with the memory cell identified by the starting parameter;

wherein the memory cells allow sequential access to the stored data according to the linear arrangement of the sensing units, the starting parameter, and an ending parameter, the ending parameter to identify which memory cell is last in the sequence of memory cells to be read.

27. (Canceled)